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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/788,389	02/21/2001	Mitsuru Nakajima	1614.1127	5409

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EXAMINER

DASS, HARISH T

ART UNIT PAPER NUMBER

3628

DATE MAILED: 04/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/788,389

Applicant(s)

NAKAJIMA ET AL.

Examiner

Harish T Dass

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION*****Specification***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc. See for example Page 24 line 6 "includes the steps of".

***Claim Objections***

2. Claim 13 is objected to because of the following informalities: The claim as failing to comply with the enablement requirement, for example; "computer specially configured" is not enabled and does not have structure. In order to enable computer-readable medium, see MPEP section 2106 [2]"Patentable Subject Matter — Computer-Related Inventions". Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Mital (US 5,903,652) in view of Claus (US 5,461,217).

Re. Claim 1, Mital discloses a secure transaction system apparatus and method provide for the auditing of secure messages in a computer network, providing security systems using encryption techniques to authenticate or "digitally sign" a document and readable medium [see entire document particularly, Abstract; Figures; C1 L1 to C6 LL42], (a) supply a first user with a matching key for a prospective transaction [C1 L42 to C2 L62], (b) receiving at a second user the matching key supplied to the first user [C1 L42 to C2 L62], and (c) matching the key supplied from the first user to the second user against the key supplied to the first user [C1 L42 to C2 L62]. Mital does not explicitly disclose Transmitting a matching key from the authentication system to a first terminal device and in response to determining that the first user satisfies conditions required for conducting the prospective transaction. Transmitting from the second user terminal to the authentication system the key supplied from the first user to the second user followed by matching the authentication system. However, Claus these steps [abstract; Figures 1, 4A, 4B, 5A; C1 L10-L61; C5 L7-L18; C9 L22-L65] to allow the transaction to be performed between two smart cards using encryption using matching keys over remote links. It would have been obvious at

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the time the invention was made to a person having ordinary skill in the art to modify the disclosure of Mital and include Transmitting a matching key from the authentication system to a first terminal device and in response to determining that the first user satisfies conditions required for conducting the prospective transaction. Transmitting from the second user terminal to the authentication system the key supplied from the first user to the second user followed by matching the authentication system, as disclosed by Claus, to provide means of secure transaction using matching encryption using matching keys.

Re. Claim 2, Mital discloses wherein the authentication system authenticates the identity of the users prior to supplying the first user with the matching key [C4 L47 to C5 L25; C10 L36-L47].

Re. Claims 3-4, Mital discloses credit confirmation for a transaction (proposed transaction is within a previously determined credit) and payment authorization (wherein the authentication system determines whether the proposed transaction satisfies previously determined conditions for a transaction) [Figures 7-8A; C5 L50 to C6 L7; C8 L43-L57; C14 L54 to C15 L7] Mital does not explicitly disclose monetary limit. However, this step is commonly known to credit card holders and financial institutions issuing credit cards and is commonly know as credit limit (daily debit limit for ATM users), which are predetermined by the financial institutions to prevent over charging, loss and theft. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to

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modify the disclosure of Mital and include monetary limit to assure the transaction is within the credit limit granted to the cardholder for avoid major loss.

Re. Claim 5, Mital discloses wherein the supplying matching keys comprising supplying different keys to both users [C1 L42 to C2-L2].

Re. Claim 6, Mital discloses supplying a matching key to the second user in a prospective transaction, receiving at the first user terminal the matching key supplied to the second user, and (f) matching the key supplied from the second user to the first user with the key supplied from the first user to the second user [C1 L2 to C3 L9].

Re. Claim 7, Mital discloses providing payment of the transaction based on the matching results the authentication system [C1 L2 to C3 L9; C8 L43 to C9 L4; C29 L59 to C30 L65].

Re. Claim 8, claim 8 is rejected with same rational as claim 1.

Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mital in view of Claus and Lee et al (hereinafter Lee – US 4,912,762).

Re. Claim 9, Mital discloses a secure transaction system apparatus and method provide for the auditing of secure messages in a computer network, providing

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security systems using encryption techniques to authenticate or "digitally sign" a document, and readable medium [see entire document particularly, Abstract; Figures; C1 L1 to C6 LL42]. Mital does not explicitly disclose a first transmitting unit that transmits information concerning a prospective transaction to an authentication system that supplies different matching keys to the users, a first receiving unit that receives the matching keys to the transaction sent from the authentication system in response to transmitted information concerning the prospective transaction, a second transmitting unit that exchanges matching keys between the users, and transmits the exchanged matching keys to the authentication system for matching, and a second receiving unit that receives match results from the authentication system, and response to finding that the users satisfy response conditions required for conducting the prospective transaction. However, Lee discloses management of cryptographic keys and the above steps (not disclosed by Mital) [see entire document particularly Abstract; C1 L1 to C4 L15; C5 L29 to C6 L30; C8 L20 to C10 L25] to key sharing between end points and encoding messages for transmitting and receiving between nodes. Claus discloses response to finding that the users satisfy response conditions required for conducting the prospective transaction [C1 L10-L61; C5 L7-L18; C9 L22-L65] to update/change transactions between user smart cards and bank smart cards. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine the disclosures of Mital, Claus and Lee to provide a method and apparatus for use in deriving the end-to-end component, which are useful in encryption.

Re. Claims 10-13, claims 10-13 are rejected with same rational as claim 9.

### ***Conclusion***

Claims 1-13 are rejected.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harish T Dass whose telephone number is (571)272-6793. The examiner can normally be reached on 8:00 AM to 4:50 PM.



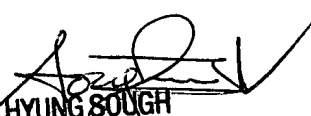
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S Sough can be reached on **(571)272-6799**. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Harish T Dass  
Examiner  
Art Unit 3628

4/15/05

  
HYUNG SOUGH  
SUPERVISORY PATENT EXAMINER  
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